

a2
cont 2.3:1, and the polymer is capable of holding 90-99.75% water.

[Delete Paragraph 13 and replace with the following:]

a3
The polymer is useful in a method of preparing articles from the macroporous hyperhydroxy polymer essentially comprising substantially similar fractions of functional acrylic monomers, which method comprises, mixing substantially similar fractions of a purified monoester of a hydroxyalkyl acrylate having a single olefinic double bond and a methacrylic acid with a sufficient amount of a polymerization initiator, holding the mixture under polymerization conditions to form a polymer gel, and casting the polymer gel to shape, whereby the article is capable of holding 90-99.75% water.

[Delete paragraph 14 and replace with the following:]

The polymer exhibits utility in a variety of fields including as a coating for surface treatments such as anti-icing materials, lubricants and the like, as a soil hydratant, as dermatological devices such as bandages, burn dressings, and the like, as chemical transport membranes, as biological implants, and as spill recovery materials. However, a principal use of the polymer is in the fabrication of soft contact lenses which comprise the macroporous hyperhydroxy polymer prepared by polymerizing a mixture comprising 40-60 parts by weight of a purified monoester of a hydroxyalkyl acrylate having a single olefinic double bond, and 40-60 parts by weight of a methacrylic acid, wherein the lens exhibits a water content of from 90-

3
Hand
99.75%.

[Delete Paragraph 24 and replace with the following:]

A4
The polymer is produced from a monomer mixture comprising 40-60 parts by weight of a purified monoester of a hydroxyalkyl alkyl acrylate having a single olefinic double bond, 40-60 parts by weight of a methacrylic acid, and .001-5 parts by weight of a polymerization initiator. Polymerization is accomplished by the conventional techniques of bulk polymerization, solution polymerization, suspension polymerization or emulsion polymerization. The polymerization technique used is dependent upon the volume of polymer required and the nature of the final product being produced. The resulting product is a stereospecific isotactic heterogenous copolymer product of a thermoset resin hydrogel in which the molar ratio of monoester to methacrylic acid is within the range of 1:1 to 2.3:1, preferably 1.5:1, and wherein the pore diameter of the polymer is greater than 90 Angstroms.

[Delete Paragraph 25 and replace with the following:]

As the monoester of a hydroxyalkyl acrylate having a single olefinic double bond, acceptable compounds include, but are not limited to, 2-hydroxyethyl methacrylate, glyceryl methacrylate, 2-hydroxypropyl methacrylate, glycidyl methacrylate, 2-hydroxyethyl acrylate, and 2-hydroxypropyl acrylate. Acceptable methacrylic acid includes dimethacrylates.

[Delete Paragraph 27 and replace with the following:]

A5
In addition to the substantially similar fractions of the

Sub 105 CMT
monoester and methacrylic acid, the monomer mixture may be enhanced with trace amounts of a longer chain alkyl acrylate or methacrylate ester comonomer such as cyclohexyl methacrylate, trimethylolpropane trimethacrylate or ethyleneglycol dimethacrylate. Such additional comonomers enhance the polymer crosslinking for situations where added polymer strength is desired. The trace amounts of these comonomers are generally less than 0.1% by weight of the total monomer mixture.

IN THE CLAIMS

Please cancel claims 1-8 in their entirety and without prejudice.

Please amend claim 9 as follows:

Sub B1
A6
9. (Amended) A method of preparing an article from a macroporous hyperhydroxy polymer essentially comprising substantially similar fractions of functional acrylic monomers, which comprises:

a) mixing substantially similar fractions of a purified monoester of a hydroxyalkyl acrylate having a single olefinic double bond and a methacrylic acid with a sufficient amount of a polymerization initiator,

b) holding the mixture under polymerization conditions to form a polymer gel, and

c) casting the polymer gel to shape,

whereby the article is capable of holding 90-99.75% water.

Please amend claim 16 as follows: